

THE CHRONICLE of Early American Industries

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Peter Kalm's Notes on Colonial Houses

by CHARLES W. HUGHES

Peter Kalm, a Swedish pupil of the great naturalist Linnaeus, was sent to North America by the Swedish Academy of Sciences (1748-1751). His "Journey to the New World," which appeared in Stockholm in 1753, gives an account of his experiences. Scattered among the many references to the plants and animals of our continent are curious and interesting observations on the homes of 1750 and earlier which are briefly summarized in the following paragraphs. The log cabins of the pioneer Swedish settlers, the Dutch house, the dwellings of the English all show the persistence and the variety of European methods modified by the availability or scarcity of materials. Kalm reveals, too, the wide range of comfort and convenience from the comparative luxury of the wealthy to the stark and bare living of the poor settlers. All the quotations following are numbered by book and page as they appear in the two volume English translation revised and edited by Adolph B. Benson and published in 1937 under the title "Peter Kalm's Travels In North America."

ROOFS

Hand riven shingles were made of a variety of suitable woods. In Philadelphia the favored material was white cedar. Because roofs of this material were unusually light, the brick walls were made so thin that they could hardly support a heavier roof. Yet the local supply of this wood was largely exhausted even in Kalm's day.^{1, 20} In New York some roofs were covered with tiles, some with shingles of a wood

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The Ancient Anvil

by PAUL H. LYMAN

The anvil, of ancient design, has served an important part in the development of American farms, homes and industry. Many were the things forged out on its sturdy face for the farmer, the wood-cutter, the carpenter and cooper, the shipbuilder and even the housewife; in fact, anyone using tools of iron or steel turned to the blacksmith and his clanking hammer and anvil.

With the exception of anvils made for special purposes it has retained practically its same form since its inception in ancient times, being so well designed that an infinite variety of forgings may be made upon it.

Referring to the illustration we see at A what is aptly called the horn or beak, a tapered round form, tapered on two sides and the bottom, the top being straight, and which is indispensable for forging and welding rings, chain links, horse shoes or anything of curved form.

The square base at D being about equal to the height gives the necessary stability and weight. The sides of the base have a curved form to allow space for the spikes that hold the anvil in position on the wooden block, and to relieve it of unnecessary weight, as anvils are sold by the pound.

That part of the anvil face, B, directly over the waist, E, is the most solid portion and endures the heavy hammer work. The long tail or heel at C, clears the body of the anvil so various forms may be made, such as a square U shape, and anything passed through the tool hole or pritchel hole meets no obstruction; for example the heading of a long bolt or nail.

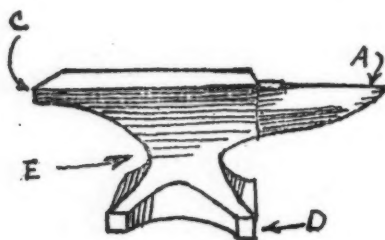
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The square tool hole in the tail of the anvil is there for the reception of a variety of square shanked tools, the most common of which probably is the hardy, a chisel shaped tool upon which the smith places his hot or cold iron to be cut by blows of the hammer.

The smaller round hole is the pritchel hole and is used in driving a punch through the iron in making a hole, such as making the nail holes in horse shoes with a punch called a pritchel.

The body of the anvil is generally made of wrought iron with the face $\frac{3}{8}$ " to $\frac{1}{2}$ " thick welded on and hardened and tempered. The horn is made of soft iron to insure toughness.

High grade anvils are also made by the casting method with a face of tool steel welded on by a special process. The first anvil made in America was made in this manner about 1847, by the Fisher and Norris Eagle Anvil Works at Trenton, New Jersey, who are still in business. The cast anvils do not have the musical ring of the wrought iron anvils. The manufacture of wrought iron anvils in early times called for considerable skill, even with the aid of the old tilt hammer run by water power, as they were made by welding the various parts into one, and as many as seven parts were welded together.



The blacksmith had a system of light hammer blows on the anvil to convey his directions to his helper who handled the sledge hammer, certain taps meaning to strike heavy or light blows, to cease striking, or the smith tapped on the hot iron to show the helper where to strike. The helper was called to the anvil from some other part of the shop by this method also.

The ancient smiths being superstitious, used to strike on the anvil at the end of the day or on Saturday night to keep the devil chained.

On some anvils will be seen small square holes on either side of the waist. Long pointed square bars are driven into these holes and used as porter bars in manipulating the anvil during the forging and tempering process.

Peter Kalm's Notes (Continued)

called "white fir" in our translation. The scientific name which is also given (*pinus strobus*) makes it clear that these were white pine shingles.^{I, 52} The same material was highly esteemed in Albany. "Such a roof is said to last forty years." ^{II, 618} The red cedar made a superior roof in localities where it was abundant.^{I, 502}

WINDOWS AND DOORS

The homes of Swedish settlers had loopholes closed by sliding shutters, "just like our Finnish cabin windows." ^{II, 728} Though the early Swedes did not have glass, they sometimes used "Muscovy glass" (i.e. sheet mica) as a substitute. Kalm saw pieces a foot long.^{I, 46} By the middle of the century the prosperous citizens north of Philadelphia had moveable double-hung windows adjusted by cords, a type which has remained in general use up to the present.^{I, 100} The doors of the Ephrata Convent in Pennsylvania were too narrow to admit more than one person at a time. "If he is fat he cannot get in at all." A single board sawn from a tulip tree was sufficient for these doors.^{II, 685}

HEATING DEVICES

Martin Garret (aged 75) told Kalm that the chimneys in Swedish houses had no dampers. He had constructed a cover for the top of his chimney which was used to retard the dissipation of heat from the fireplace during the night. "But it was troublesome to climb up on the roof of the house every night and morning." Swedish fireplaces were formerly built in the corner of the living room, but by the mid-century they were largely superseded by fireplaces in English style.^{II, 727} Baking ovens, which were earlier incorporated into the houses, were now built as separate structures because of the danger of fire.^{II, 726} Benjamin Franklin's new stoves, which Kalm describes in some detail, were so designed because "Englishmen liked to see the fire burn instead of confining it in a stove." "Some thought that it gave too much heat." The German settlers in Pennsylvania remained faithful to their box-stoves because they cost less and because they were considered to be better heaters.^{II, 652}

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Early American Industries



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Chronicle

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**EARLY AMERICAN
INDUSTRIES ASS'N**

The purpose of the association is to encourage the study and better understanding of early American industry, in the home, in the shop, on the farm, and on the sea, and especially to discover, identify, classify, preserve and exhibit obsolete tools, implements, utensils, instruments, vehicles, appliances and mechanical devices used by American craftsmen, farmers, housewives, mariners, professional men and other workers.

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Communications regarding the contents of *The Chronicle* should be addressed to the Editor; Suggestions for members and other matters either to the President or the Secretary-Treasurer.

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Supporting Members contribute \$5.00 or more a year.

BACK NUMBERS of *The Chronicle* are available in some instances for fifty cents or one dollar, depending on rarity. The Index to Volume I is available for one dollar.

Editor's Note

Not a paper shortage, for we did get a reserve of paper in advance for our *Chronicles*, but as usual, good material for articles delayed the previous issue. We are, therefore, mailing Volume III, Numbers 3 and 4 together and we are once more on schedule. Mailing the two at once also provides a good wartime economy measure. V-E Day happily has come and gone but we are still a nation at war.

Number 4 is a thin issue but it seemed better so. One of the new ideas appearing here for the first time is that of bringing together under special headings the notes made by one of the pre-Revolutionary travellers in this country. We have tried to make the article of more use by giving to our readers page notations of this material as it appears in a readily available issue of Peter Kalm.

For this idea we are indebted to Charles W. Hughes who is here listed as compiler. Mr. Hughes has in the same manner completed another composite report which will appear in a future issue of *The Chronicle*. Readers having other material of this nature, even short paragraph notations, are encouraged to send them in. We need these shorter contributions as much as the longer ones.

Index to Volume II

The Index to Volume II, we are glad to report, is now in process of completion. Many of our readers have inquired for one. Ours will follow the plan begun by the late William B. Sprague, Editor of all but the last four issues of that volume.

It will be in approved form, and to use Mr. Sprague's words, "in four parts: first, a table giving the titles of all articles; second, a list of illustrations by their captions; third, a list of all literary works, and authors, to which our writers have referred, (which in itself should be a useful biographical list); and fourth, a 'general' index, in which we have endeavored, we hope successfully, to indicate the page where any informative reference is made to any given thing or person, including a system of cross indexing. An idea of its comprehensiveness may be gained from the estimate that it will fill twelve pages."

It will be issued in the same size and general appearance of Volume II, our old larger format. To finance it we offer it for sale to members for one dollar and, as with the Index of Volume I, ask those who wish to insure the printing of it to contribute as much more as they can afford. Regrettably there are few members who have a complete file of Volume II. There are a few back numbers remaining in a few instances, which can be had at prices varying with their rarity for fifty cents or one dollar. Now many of our larger libraries, in cities or in universities, are subscribers and have been able to obtain complete files for reference use.

The Index will cover the twenty-five issues of Volume II from September, 1937, to April, 1944. Our ability to undertake it will depend on advanced interest shown and the orders which come in. We would appreciate, therefore, if you wish to subscribe to a copy or make an added donation, that you write either the Editor, in Albany, or our Secretary-Treasurer in Leicester, Mass.

Arrangements can be made for binding back issues and the Index for anyone who should wish it.

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HOUSES IN NEW BRUNSWICK, N. J.

THE HOMES OF SWEDISH SETTLERS

Early Swedish houses contained only one room with a door so low that a visitor had to stoop in order to enter.^{I. 272} The chinks between the logs were stopped with clay.^{II. 728} The chimneys were of clay only or of grey stone.^{I. 272} In an effort to keep the heat in, the earliest Swedish settlers had covered the boards of their ceilings with dirt. "No dirt is used now, only thin boards, and not any too many of these."^{II. 727} More prosperous farmers at the time of Kalm's visit lived in two-story houses of stone.^{I. 82}

DUTCH HOUSES

Dutch houses in Saratoga were started by erecting the timber framework. The spaces between the timbers were then filled with unfired bricks. Such bricks deteriorated when exposed to the weather and had to be protected by boards. In Albany the sides of the fireplaces were adorned by Dutch tiles "with a white background and blue figures." Fired brick was used for the gable-end opposite the street. Kalm notes that tile stoves (though common in parts of Europe) were not used here.^{II. 611}

HOUSES IN NEW YORK

Brick was the favorite building material in New York. The roofs, covered with tiles or shingles, were in many instances provided with a balcony "on which the people used to sit evenings in the summer season; and from thence they had a pleasant view of a great part of the town." Interior walls were covered with whitewash instead of wall paper. An alcove was constructed on either side of the chimney. Interior woodwork was painted "with a bluish gray color."^{I. 132}

In New Brunswick there were houses made with planks without a supporting framework of timbers. Laths were used to join the planks on the inside. Houses made of brick and wood utilized brick only on the side towards the street. "This peculiar kind of ostentation would easily lead a traveller who passes through the town in haste to believe that most of the houses are built of brick." The front porch was already a familiar feature. It was furnished with benches and approached from the street by means of steps.^{I. 121}

A GERMAN BARN—A SPRING HOUSE

The size of the barns in the countryside between Trenton and New Brunswick impressed Kalm who described them as "almost the size of a small church." The central threshing floor was flanked on one side by the horse stable, on the other by the cow barn. It was possible to drive through the barn, entering by large doors at one end and leaving through similar doors in the opposite end. "Here under one roof therefore were the thrashing floor, the barn, the stables, the hay loft, the coach house, etc."^{I. 113}

The spring house was a frequent feature of a Pennsylvania farmstead. A spring was arranged so as to flow into "a little stone building near the house where they can confine it." Here the milk was cooled as well as "bottles of wine and other liquors."^{I. 161}

DWELLINGS IN ENGLISH STYLE

Country houses north of Philadelphia were constructed in the English style. The house walls below the level of the ground were of stone, above of brick. The cellar might be utilized for storing goods or as "pantry, wood-shed, or sometimes a kitchen." The

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